PHMC Environmental Management Performance Report – August 2001 Section A – Executive Summary



# Section A Executive Summary

#### **INTRODUCTION**

his section of the report is intended to provide Management with an executive-level summary of the most noteworthy performance information to date. All cost, schedule, milestone commitments, performance measures, and safety data is current as of June 30, 2001. Accomplishments, Issues and Integration items are current as of July 25, 2001 unless otherwise noted.

The section begins with a description of notable accomplishments that have occurred since the last monthly report and are considered to have made the greatest contribution toward safe, timely, and cost-effective clean up. Following the accomplishment section is an overall fiscal year-to-date summary analysis addressing cost, schedule, funds management and milestone performance. Overviews of safety ensue. The next segment of the Executive Summary, entitled Breakthroughs and Opportunities for Improvement represents potential significant improvements over the established baseline. The Critical Issues section is designed to identify the high-level challenges to achieving cleanup progress.

The next section includes FY 2001 EM Management Commitment Milestones and Critical Few Performance Incentives.

The Key Integration Activities section follows next, highlighting PHMC activities that cross contractor boundaries and demonstrate the shared value of partnering with other Site entities to accomplish the work. Concluding the Executive Summary, a forward-looking synopsis of Upcoming Planned Key Events is provided.

Note: Milestones tracked and reported in this report consist of two Department of Energy levels. In descending order these levels are 1) Department of Energy-Headquarters (HQ), and 2) Richland Operations (RL). Because it is also useful to distinguish milestones based on specific drivers, the Site applies a designation for those milestones created or tracked to meet the requirements of Enforceable Agreements (EAs). When a milestone satisfies both an EA requirement and a milestone level, it is categorized as both. However, in order to avoid duplicate reporting, this report accounts for each milestone only once. Where an overlap exists between EA and a level (i.e., HQ or RL), the milestone is reported as EA. Additionally, Tri-Party Agreement (TPA) Major and Interim milestones are EA milestones. TPA milestones that are not enforceable are called Target milestones and are included in the TPA/EA milestone tables found in the applicable Project Sections.

## **NOTABLE ACCOMPLISHMENTS**

**Land Disposal Restriction (LDR) Report** — The CY 2000 LDR report was approved by RL and transmitted to the regulators on June 28, 2001. This transmittal met the requirements of Tri-Party Agreement milestone M-26-01K.

**HEPA Filters Replaced** — Ninety-six contaminated HEPA filters, vintage 1978, were successfully replaced and tested at the 222-S Laboratory over the fourth of July weekend. Disruption of analytical work was avoided, and no injuries or skin contaminations occurred. A high level of teamwork and planning was involved in order to complete this work safely under high temperature conditions.

**Stabilization of Nuclear Material** — Repackaging of the 31 plutonium/aluminum (Pu/Al) Alloys Group 1 was completed on June 19, 2001 thereby completing the residues packaging portion of milestone TRP-01-501, "Complete Plutonium Alloy Stabilization or Shipment." Thermal stabilization and packaging of Pu alloys was initiated. A total of forty-seven (47) liters of solution were processed through the magnesium hydroxide [Mg(OH)<sub>2</sub>] hot plates during the month of June, bringing the FYTD total to 562 liters.

**B Cell Mixed Waste Cleanout Completed** — All twenty-one 3-82B Grout Containers have been loaded out and shipped to the Central Waste Complex, completing the work scope of M-89-02, "Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B-Cell Mixed Waste (MW) and Equipment."

**Accelerated Deactivation Project Efforts Continue** — The project has completed all nine shipments (135 metric tons) of contaminated fuel to the Low-Level Burial Ground (LLBG). Additionally, both water towers scheduled for demolition are now on the ground; and, the first entry into 224-T's E Cell was successful, finding no airborne and minimal contamination.

**Equipment Disposition Project Activities Continue** — The first of four tall well cars (once used to transfer fuel from the reactors to the processing plants) was shipped from Hanford to Memphis, TN. on July 16, 2001. This seventy-five tons of scrap is being recycled, which avoids burying the car at Hanford as mixed waste.

**Fuel Movement Activities Continue** — Sixteen Multi-Canister Overpacks (MCOs) (332 canisters – 4608 fuel assemblies) have been removed from K West (KW) Basin for a total of 74.85 Metric Tons of Heavy Metal (MTHM) shipped. The sixteenth MCO was shipped to the Cold Vacuum Drying (CVD) Facility on July 9, 2001. After being processed at the CVD Facility, it was then shipped to the CSB on July 12, 2001.

**The 300 Area Powerhouse Bunker Tank Removal project completed** — This project provides for the removal of the 300 Area powerhouse concrete bunker tank. This 450,000 gallon tank is 54 years old and until 1998, was used to store diesel fuel for the powerhouse supplying steam to the entire 300 Area. Over its life span, the tank had leaked and consequently, removal was required by the Washington State Department of Ecology (WSDOE) to eliminate a source of fuel contamination to the 300 Area. The removal of the concrete bunker tank was completed on July 17, 2001.

## **PERFORMANCE DATA AND ANALYSIS**

The following provides a brief synopsis of overall PHMC Environmental Management (EM) cost, schedule, and milestone performance.

#### FY 2001 Schedule and Cost Performance

**Schedule Performance** — There is a FY 2001 year-to-date 4.8 percent (\$19.8 million) unfavorable schedule variance that is within the established 10 percent threshold. Advanced Reactors Transition is the only project outside the threshold. Detailed variance analysis explanations can be found in the Project Sections.

**Cost Performance** — FY 2001 year-to-date cost performance reflects a 0.4 percent (\$1.7 million) favorable cost variance that is within the established 10 percent threshold. Projects outside the threshold are Advanced Reactors Transition, Mission Support, and National Programs. Detailed variance analysis explanations can be found in the Project Sections.

**Estimate at Completion (EAC)** — Because the EACs portrayed on the following table represent current estimates for authorized work, they may differ from the Performance Execution Module (PEM) column. Additionally, approved changes to the baseline are reflected in EACs but may not yet be included in the PEM database due to timing issues.

# BASELINE PERFORMANCE STATUS FY 2001 COST / SCHEDULE PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS (\$M)

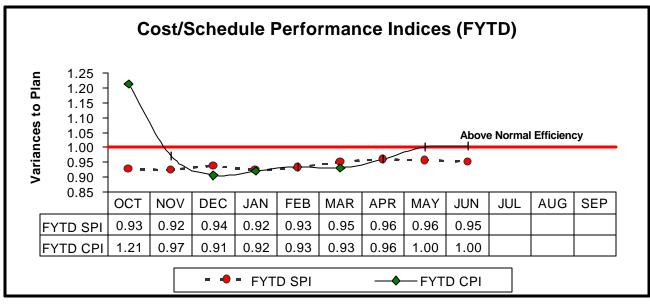
		Cur	rent Fiscal Yea	r Performano	e (\$ x Million	)		
			FYTD		Schedule	Cost	PEM	EAC
Tr-		BCWS	BCWP	ACWP	Variance	Variance		
The Plat	teau							
1.2	Waste Management TP02,WM03-05	77.0	76.5	74.8	(0.5)	1.7	106.4	103.0
1.2.4	Analytical Svcs (222-S,HASP,WSCF) WM06	23.4	23.1	22.0	(0.3)	1.1	31.8	31.5
1.4.5	Nuclear Materials Stabilization TP05	82.1	77.8	80.0	(4.3)	(2.2)	113.4	114.6
	Subtotal The Plateau	182.5	177.4	176.8	(5.0)	0.6	251.6	249.1
The Riv	er							
1.4	River Corridor TP01,TP04,TP08,TP10,TP12,TP14	37.9	34.7	32.9	(3.2)	1.7	51.2	50.6
1.3	Spent Nuclear Fuel WM01	129.6	122.4	121.8	(7.2)	0.6	189.3	186.4
1.12	Advanced Reactors (EM)	1.3	1.2	2.5	(0.1)	(1.3)	1.9	1.9
	Technology Development (EM-50)	18.2	16.9	16.3	(1.4)	0.6	24.4	21.5
	Subtotal The River	187.1	175.1	173.5	(11.9)	1.6	266.8	260.4
The Fut	ure							
1.9	HAMMER HM01	4.5	4.3	3.9	(0.2)	0.4	6.4	6.3
	Subtotal The Future	4.5	4.3	3.9	(0.2)	0.4	6.4	6.3
Multiple	Outcomes							
1.5	Landlord TP13	16.1	14.7	14.0	(1.3)	0.8	23.2	23.5
1.8	Mission Support OT01	17.4	16.1	18.6	(1.4)	(2.5)	23.8	22.8
1.11 & WM07	National Programs OT02, WM07	3.6	3.6	2.7	0.0	0.8	5.5	5.0
	Subtotal Multiple Outcomes	37.1	34.4	35.3	(2.7)	(0.9)	52.5	51.3
	Total PHMC Projects	411.1	391.3	389.6	(19.8)	1.7	577.3	567.1

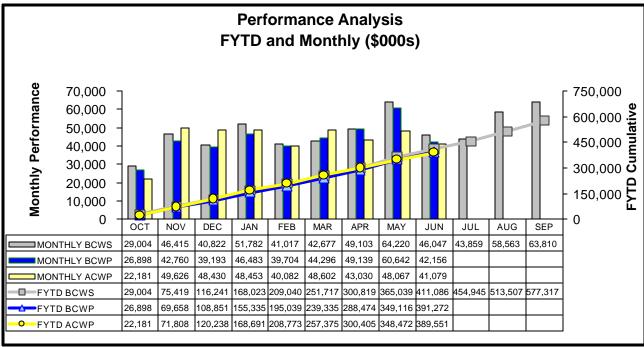
**DATA THROUGH JUNE 2001** 

**Notes:** Column headings [Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), etc.] are defined in the glossary at the end of the report. Calculations are based on Project Baseline Summary detail. Waste Management, Analytical Services, River Corridor, and Nuclear Materials Stabilization have included RL-Directed costs (e.g. steam and laundry) in the Project Execution Module (PEM) BCWS. Advanced Reactors ACWP includes \$1.7M of cost which is in WBS 2.1.1.1.4.1 and is not ART cost; see section E: 3 for details. Technology Development does not include ORP/RPP TTPs currently reported in the RL Dataset in PEM.

The following charts provide an overall graphical view of cost and schedule performance.

## FY 2001 SCHEDULE / COST PERFORMANCE





# FUNDS MANAGEMENT FUNDS VS. SPENDING FORECAST (\$000) (FLUOR HANFORD, INC. ONLY)

This chart reflects FH Project structure, which divides PBS WM05 between projects. This breakout is necessary to provide FH project managers with information specific to their areas of responsibility and accountability and to facilitate effective management of the funds within their control (obligated to the PHMC). Consequently, these figures will differ from those shown elsewhere in this report (as generated in the PEM system).

For purposes of funds management, the "Other" category includes all funding sources not suitable for redistribution within the Project Completion and Post 2006 control points.

Data Through June 2001

	Project Completion Control Point		Post 2006 Control Point				Line Items and Other									
		Funds	FYSF	١	/ariance		Funds		FYSF	٧	ariance		Funds		FYSF	Variance
The Plateau 12 Waste Management							98,580		95,453		3,127					
TP02,WM03-05  1.2.4 Analytical Svcs (222-S,HASP,WSCF)  WM06							30,766		30,419		347					
1.4.5 Nuclear Materials Stabilization TP05 Line Item		95,812	94,197		1,615								12,125		12,125	0
Subtotal The Plateau Operating Subtotal The Plateau Line Item	\$	95,812	\$ 94,197	\$	1,615	\$	129,346	\$	125,872	\$	3,474	\$	12,125	\$	12,125	0
The River  1.4 River Corridor  TP01,TP04,TP08,TP10,TP12,TP14,WM05  Line Item		48,964	47,405		1,559		5,637		5,342		295					
1.3 Spent Nuclear Fuel  WM01 Line Item 1.12 Advanced Reactors (EM)		196,462	176,825		19,637		3,483		3,180		303					
Subtotal The River Operating Subtotal The River Line Item	\$	245,426	\$ 224,230	\$	21,196	\$	9,120	\$	8,522	\$	598					
The Future  1.9 HAMMER  HM01							6,284		6,041		243					
Subtotal The Future						\$	6,284	\$	6,041		243					
Multiple Outcomes  1.5 Landlord							22,437		20,965		1,472					
TP13  1.8 Mission Support  OT01							15,780		15,963		(183)					
Subtotal Multiple Outcomes Operating Subtotal Multiple Outcomes Line Item						\$	38,217	\$	36,928	\$	1,289					
Total PHMC Proj Operating	\$	341,238	\$ 318,427	\$	22,811	\$	182,967	\$	177,363	\$	5,604					
Total PHMC Line Items/Other												\$	12,125	\$	12,125	0

Note: SNF and NMS Funds include President's FY01 Supplemental Funding as approved 7-26-01.

[Status as of 7-27-01]

Note: "Funds" is expected funds.

## **MILESTONE PERFORMANCE**

Milestones represent significant events in project execution. They are established to provide a higher level of visibility to critical deliverables and to provide specific status about the accomplishment of these key events. Because of the relative importance of milestones, the ability to track and assess milestone performance provides an effective tool for managing the PHMC EM cleanup mission.

FYTD milestone performance (Enforceable Agreement [EA], U.S. Department of Energy- Headquarters [DOE-HQ], and RL) shows that 41 milestones were completed on or ahead of schedule, six milestones were completed late, and seven milestones are overdue. The seven overdue milestones are associated with five projects: Nuclear Material Stabilization (Section C: 1), River Corridor (Section C: 2), Spent Nuclear Fuel (Section D), Science and Technology Activities (Section F), and HAMMER (Section G).

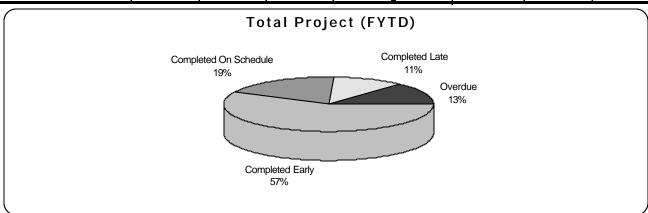
In addition to the FY2001 milestones described above, there is one overdue milestone [Waste Management (Section B: 1)] from FY1999. Further details regarding this milestone may be found in the referenced Project Section.

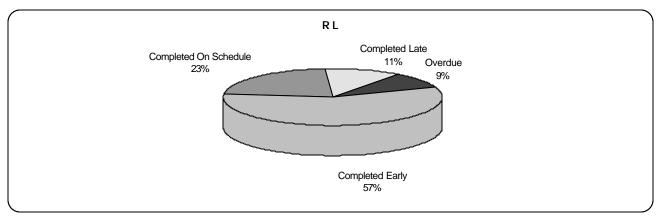
FY 2001 information is depicted graphically on the following page. For additional details related to the data and prior year milestones, refer to the relevant project section titled "Milestone Exception Report." FY 2001 information reflects the Phase 1 MultiYear Work Plans (MYWPs). Changes in both the number and type of milestones from month to month are the result of Baseline Change Requests (BCRs) approved during the year.

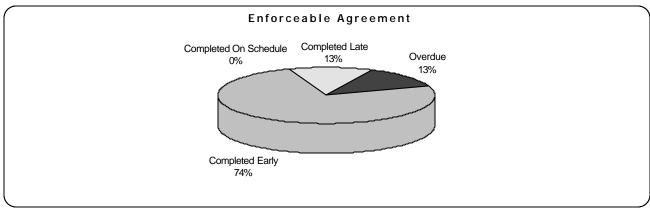
# **TOTAL ALL HANFORD PROJECTS**

## **MILESTONE ACHIEVEMENT**

	F	ISCAL YEA	R-TO-DATE		REMA			
MILESTONE TYPE	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	T O T A L FY 2001
Enforceable Agreement	6	0	1	1	0	3	0	11
DOE-HQ	0	0	0	2	0	2	0	4
RL	25	10	5	4	2	25	1	72
Total Project	31	10	6	7	2	30	1	87

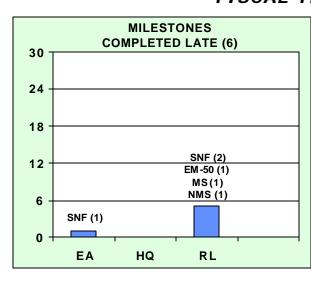


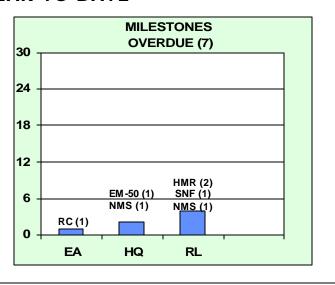




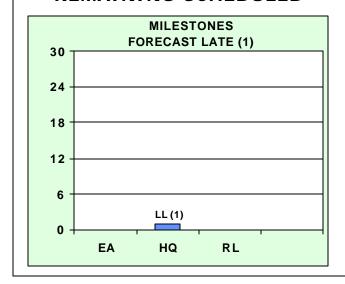
## **MILESTONE EXCEPTIONS**







#### REMAINING SCHEDULED



These charts provide detail by project and milestone level / type for milestones

- Completed Late
- Overdue
- Forecast Late
- Detailed information can be found in the individual project sections

## **SAFETY OVERVIEW**

The focus of this section is to document trends in occurrences. Improvements in these rates are due to the efforts of the PHMC workforce as they implement the Integrated ES&H Management System (ISMS), work towards achieving Voluntary Protection Program (VPP) "star" status, and accomplish work through Enhanced Work Planning (EWP). Safety and health statistical data is presented in this section.

# **Significant Safety and Health Events**

#### PHMC Level

Occupational Safety & Health Administration (OSHA) Recordable Case Rate: The FH OSHA Recordable Case Rate remains stable at 1.5 cases per 200,000 hours. All FH Team projects have commenced injury reduction efforts to address lacerations and ergonomic injuries.

**Lost Away Workday Case Rate:** No new lost away workday cases have occurred since February 27, 2001. The current safe work hour count for the FH Team is 3,620,844. However, a November 2000 subcontractor case was reclassified from lost restricted to lost away due to surgery performed on June 4, 2001. As a result, the Lost Away Workday Case Rate for FY 2001-to-date is now 0.05 cases per 200,000 hours.

**U.S.** Department of Energy (DOE) Safety Cost Index: The FH DOE Safety Cost Index is stable at the revised baseline average of 3.6 cents per hour, following the current average and control limits. The baseline was adjusted due to additional days gained on cases during the baseline time interval.

#### **Project Level**

The **Waste Management (WM) Project** has surpassed 2.5 million work hours without a lost away workday case. The WM OSHA Recordable Case Rate has remained stable at 1.8 cases per 200,000 hours for more than a year, but this rate is above the company goal of 0.9 and needs improvement. WM personnel are addressing the injury reduction issue in its Employee Zero Accident Councils. There has been a significant decrease in the DOE Safety Cost Index, with the last seven months below average.

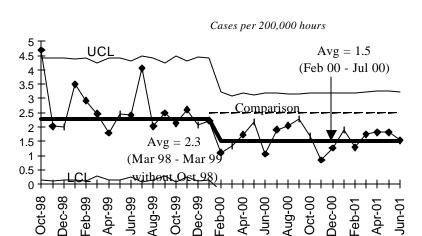
The **Nuclear Material Stabilization Project** should reach 2 million safe work hours by the end of July or early August. The OSHA Recordable Case Rate is stable at the revised baseline average of 2.4 cases per 200,000 hours worked. The project recently completed a safety perception survey as part of its VPP baselining activities and is currently communicating results back to the employees and developing a strategic plan for improved performance.

The **River Corridor Project (RCP)** has exceeded 1.7 million hours since the last lost away workday case. The OSHA Recordable Case Rate is showing signs of potential improvement with no new cases occurring in the past three months. RCP implemented an ergonomic injury reduction plan to address the increase in recordable injuries. The Safety Cost Index is stable at a good value, 3.7 cents per hour. On June 21, 2001, RCP submitted its VPP application to RL and the application was forwarded to DOE-HQ for review.

The **Spent Nuclear Fue I Project** reached 3 million safe work hours at the end of June 2001. The OSHA Recordable Case Rate is approaching the Fluor Corporate goal of 0.9. Due to a statistically significant reduction over the past eight months, the chart has been rebaselined to an average rate of 1.0 cases per 200,000 hours worked.

Due to space constraints, FY 1996 through FY 1998 data is not portrayed on the following graphs.

#### **Total OSHA Recordable Case Rate**



Green

FY 2000 = 1.9 FY 2001 to date = 1.5 Contractor Comparison Average = 2.5 (CY00)

Recent data have been stable within the new 1.5 baseline. The FH Team continues to look for opportunities for injury reduction in the areas of ergonomics and lacerations.

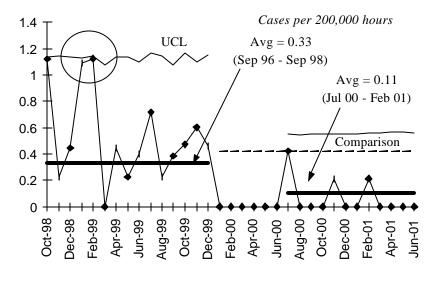
FH implemented a program to target an OSHA Recordable Case Rate of 0.9. The Fluor Global Services goal is 1.0.

This goal is in line with Fluor's corporate value of safety and our commitment to the safe clean-up of the Hanford Site. A team continues to work on Health Physics Technician ergonomics, focusing upon work practices and equipment. HPT's are the leading source of injuries, and these are primarily ergonomically related. Actions are being taken to address human factors issues with equipment and the aging workforce through the cooperation of the HPT's, their management, ES&H, and HEHF.

The Department of Energy complex-wide rates for DOE contractors are used as comparisons on these charts.

## **OSHA Lost Away Workday Case Rate**





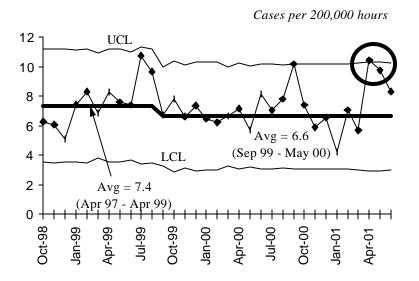
FY 2000 = 0.16 FY 2001 to date = 0.05 Contractor Comparison Average = 0.42 (CY00)

The Lost/Restricted Workday Case Rate chart has been replaced with this Lost Away Workday Case Rate Chart. This action aligns the executive summary with the individual project charts.

FH has achieved a very low rate on this indicator, with a significant decrease over the past 2 years.

### **FIRST AID CASE RATE**



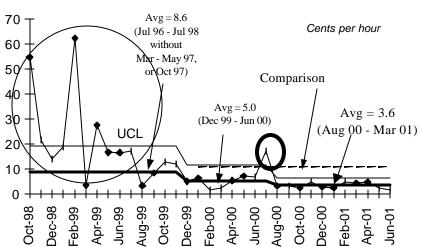


First Aid Rate undergoes seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. Such an increase has occurred this Spring. Hanford is especially susceptible to wind borne debris injuries due to the site wildfire last summer. First Aid case rate has remained relatively stable, a good indicator that injuries are not being under-reported.

Fiscal year calculations are not included as DOE does not publish a comparison rate, and comparisons of partial fiscal year data to prior years would not be appropriate due to the cyclical trend in the data.

### **DOE SAFETY COST INDEX**

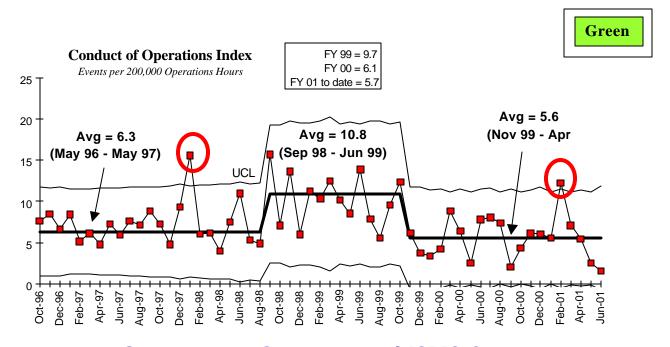




FY 2000 = 6.9 FY 2001 to date = 3.5 Contractor Comparison Average = 10.8 (CY00) The data are stable within the

current average and control limits. There has been a long term improving trend on this chart. The current performance is well below DOE average, and the historical 8.0 goal for this indicator.

Past data continue to be corrected as further days accumulate on any work restrictions or lost days.



# **CONDUCT OF OPERATIONS / ISMS STATUS**

## **ISMS STATUS**



The draft **Waste Management** VPP application is available for review and comment by all Project employees. Efforts continue to educate and involve WM employees in the VPP effort through use of the WM VPP TidBits information bulletin and a VPP "Longest Drive" golf competition, which includes answering questions about the VPP tenets. In addition, the VPP Steering Committee is developing informational posters to be provided to projects and facilities.

The **River Corridor Project** ISMS "Sustain and Maintain" process is in place. RCP is supporting the update of the FH annual ISMS training module through the ISMS Center of Expertise. The Voluntary Protection Program application was submitted to the DOE-RL Manager on June 21, 2001, and forwarded to DOE-HQ. The application will be reviewed by DOE-HQ personnel and a DOE-HQ on-site field review scheduled for later in the year.

**Spent Nuclear Fuel** Project personnel continue to demonstrate a commitment to ISM in "Doing Work Safely." Several examples of this include:

- Implemented a priority system to accomplish work that focuses on corrective maintenance necessary to continue facility operation and preventive maintenance to support the facility authorization basis. Currently, Engineering, Planning, Work Control and Maintenance organizations are working to the same goals established by Facility Managers.
- Completed the second maintenance outage cycle by maintenance and operations personnel.
- Conducted a "Time Out for Safety" following the completion of the second maintenance outage.
- Achieved over 3 million safe work hours.

## **Breakthroughs / Opportunities for Improvement**

# **Breakthroughs**

**Project W-460** — Construction of this project will be completed by October 1, 2001 (eighteen months ahead of schedule).

International Atomic Energy Agency (IAEA) — The new Epithermal Neutron Multiplicity Counter (ENMC) received from Los Alamos National Laboratory (LANL) and tested at PFP has proven to be a faster and more accurate way to measure material. If PFP and Protection Technology Hanford can qualify the counter, additional items may undergo nondestructive assay per day than is currently possible with existing calorimetry. This approach may also prevent a backlog of items needing measurement.

**New hot plate design ¾** A procurement contract was placed with Bellhaven to provide an improved hot plate for use in the 230-C-2 glovebox. A new design, to improve the reliability of the hot plate and drying of the precipitate, has been developed and a prototype is in fabrication for testing at PFP. The prototype is scheduled to be available the last week of July 2001.

**Technical Review of 327 Hot Cell Removal**— RCP and Technology Management collaboratively prepared the *327 Building Stabilization Science and Technology Plan*, which provides a schedule for identifying and demonstrating technologies supporting monolithic hot cell removal.

**Value Engineering for Configuration Management** — As previously reported, the RCP procedures, "Configuration Baseline Management," and "Engineering Document Change Control," were approved June 1, 2001. The two procedures authorize the use of alternate configuration management methods. Use of the alternate methods has the potential to dramatically change the way in which facility modifications are documented within the RCP. The procedures allow for a streamlined configuration management process that should have the greatest benefits during demolition and equipment removal activities.

**Permit By Rule Treatment at 300 Area TEDF** — FH is investigating the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of the 300 Area TEDF by applying a permit exclusion available within the waste regulations. Treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of some wastes currently sent off-site. The regulatory analysis is complete, and for the next two months the benefits and site needs for waste treatment will be compared against the costs and risks of implementing the treatment. A decision on whether to proceed will be made in September 2001.

**SNF Accelerated Closure Team (ACT)** 3/4BCRs were submitted for DOE approval on two of the ACT initiatives: Accelerated Sludge Capture and Removal Strategy and Transition Deactivation Budget Reallocation.

**MCO Production Rate Improvements** — All equipment required to support and operate the manual process tables has been installed and tested. The new equipment is expected to be fully operational by August 1, 2001 and a reduction of up to 30 percent in the average processing time is expected. When this improvement is realized, MCO production capacity from K West Basin will be sufficient to meet all production requirements.

## **Opportunities for Improvement**

Nothing new to report at this time.

### **ISSUES**

**T Plant Canyon Cleanout** — T Plant Canyon cleanout has been delayed by the discovery, during planned cell visual inspections, of an unanticipated tank containing liquid and salt cake in Cell 11-L. Need for continuation of restrictions on canyon activities will be reassessed by Facility Management and addressed with RL(ABD). Sampling and characterization of tank contents will continue, as will independent effort to document inventory of remaining cells not inspected. This item will be updated when Cell 11-L's contents and remaining cells' inventory are completed.

**Exposed TRU Drum Retrieval** — The frequency of occurrence of unvented drums containing in excess of 15 grams plutonium is higher than assumed in the Low Level Burial Ground Justification for Continued Operation (JCO). Retrieval operations were suspended when two unvented drums above the RL-imposed limit for Trench 29 were discovered during retrieval operations in Trench 1 on May 31, 2001. A new JCO is being prepared to support completion of exposed drum retrieval in trenches 1, 20, 24, and 29. Subcontractor remobilization and resumption of retrieval is tentatively planned for early August based on RL progress in evaluating the JCO.

**Demolition of the 303-K facility** — BHI verbally informed RCP that it may not be able to support the demolition schedule for the 303-K facility. The delay will result in RCP missing the RCRA Part B permit condition of clean closure certificated submittal due September 30, 2001. BHI has provided a schedule and estimate that completes 303-K demolition by September 20, 2001, which will meet the Performance Incentive, but will require an extension to the RCRA Part B permit closure. Ecology is receptive to an extension and the process to extend the permit closure to December 31, 2001 has been initiated.

PFP Non-destructive Assay (NDA) Program Suspension — The Nondestructive assay (NDA) calculation of plutonium concentrations in packaged waste has recently come under question. FH, Bechtel Hanford, and RL continue to address this issue. At this time approximately two hundred forty (240) items have been reanalyzed and recalculated. An additional four hundred items are expected to undergo a second non-destructive assay by September 14, 2001. Characterization activities at RCP's 224-T and 231-Z facilities are impeded by the suspension of the NDA program at the Plutonium Finishing Plant (PFP). The PFP program has been suspended due to problems associated with specific plutonium value calculations resulting from NDA measurements. These delays impact Master Documented Safety Analysis development, Fire Hazards Analysis, and Emergency Planning Hazard Analysis. These activities tie into the Safety Analysis Report compliance issues per the 830 Rule. In addition, there is a potential cost impact if an outside organization is used. Replacement of PFP NDA program with PNNL NDA personnel is being investigated. Initial investigation suggests that PNNL can support NDA at 224-T by mid-August, and 231-Z NDA activities in fiscal year 2002.

# **EM CORPORATE PERFORMANCE MEASURES**

	FYTD	FYTD	FY 2001
Performance Measures	Planned	Actual	Commitment
Facilities Deactivated/Decommissioned			
Facilities deactivated	19	19	7
Facilities decommissioned	8	9	12
TRansUranic (TRU) Waste			
Stored - total inventory (m <sup>3</sup> )	16,683	16,507	n/a
Disposed (m <sup>3</sup> shipped to DOE site )	34	35	42
High Level Waste			
Stored - total inventory (m <sup>3</sup> )	2	2	n/a
Treated (m <sup>3</sup> )	3,028	3,179	n/a
Mixed Low Level Waste			
Stored - total inventory (m <sup>3</sup> )	7,835	7,227	n/a
Treated (m <sup>3</sup> )	400	440	568
Disposed (m <sup>3</sup> )	407	159	478
Low Level Waste			
Stored - total inventory (m <sup>3</sup> )	299	299	n/a
Disposed (on-site/commercial) (m <sup>3</sup> )	5,208	5,885	6734
Material Stabilized			
Plutonium Oxide (cans)	350	242	500
Plutonium Solution (L)	1614	494	n/a
Plutonium Residue (kg)	465	330	321
SNF Moved to Dry Storage			
Heavy Metal (MT)	79	79	53
Technology Deployments	7	7	18
Pollution Prevention			
HAZ (MT)	39	11	n/a
SAN (MT)	1,692	179	n/a
LLW (m <sup>3</sup> )	418	142	n/a
MLLW (m <sup>3</sup> )	131	83	n/a
Cleanup/Stabilized Waste Avoided			
FY2001 planned baseline amount (m <sup>3</sup> )	1,926	2,881	n/a

For deviations +/- 10%, see the following projects sections: MLLW and LLW Disposed (Waste Management Project); Materials Stabilized - Plutonium Oxide, Solution, and Residue (Nuclear Materials Stabilization Project). For Pollution Prevention, less waste is being generated than planned. Waste avoided has been more than planned. NOTE: The TD Commitment is shared with BHI.

## **EM MANAGEMENT COMMITMENT MILESTONES**

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Пата	THROUGH		2001
JAIA	IHKUNUSH	JUJIMIE	2001

Milestones	Due	Forecast Date	Actual Date	Status /
Milestones	Date			Comments
<b>Nuclear Materials Stabilization</b>				
Package plutonium alloys for disposition to WIPP or for long-term storage	6/30/01	On hold		Overdue
Complete brushing and repackaging of plutonium metal inventory	8/31/01	8/31/01		On Schedule
Complete repackaging and shipping of Rocky Flats ash to CWC	4/30/01	3/29/01	3/29/01	Complete
River Corridor				
Complete shipment of waste from B-Cell cleanout (M-89-02)	7/31/01	7/31/01	7/17/01	Complete
Spent Nuclear Fuels				
Remove first MCO from K-West Basin	11/30/00	12/7/00	12/7/00	Complete
Approve Construction of Alternate Fuel Transfer Strategy Basin mods	9/30/01	9/30/01		On Schedule
Waste Management				
Transmit T -Plant Sludge Storage Conceptual Design to Ecology	6/29/01	6/11/01	6/11/01	Complete

## **CRITICAL FEW PERFORMANCE INCENTIVES**

The following table portrays the multi-year incentives. Specific current performance data can be found in the individual Project Sections.

PERFORMANCE MEASURES	Data Through June 2001
Spent Nuclear Fuel:	
Measure – Transfer K-Basin Facility to River Corridor Contractor Remove spent fuel by July 31, 2004	Green
300 Area Cleanup:	
Measure – Accelerate 300 Area cleanup	Green
Measure – Support River Corridor Project contract transition	Green
200 Area Facility Disposition:	
Measure – Disposition surplus buildings and rolling stock	Green
Waste Management:	
Measure – Treat and Dispose MLLW	Green
Measure – Certify TRU waste and ship to WIPP	Green
Measure – Complete physical activities necessary to store K-Basins sludge at T-Plant	Green
Measure – Complete contractor readiness assessment (T-Plant)	Green
Measure – Prepare T-Plant to support M-91 activities	Green
Plutonium Stabilization:	
Measure – Pu metal/oxides/other types dispositioned	
All Pu bearing materials stabilized by May 31, 2004	Green
Measure – PFP Deactivation	Green

## **KEY INTEGRATION ACTIVITIES**

The following are the key technical integration activities that are currently underway and cross project/contractor lines. These activities are being addressed by inter-discipline and inter-project groups and demonstrate that Hanford Site contractors are working together to accomplish the EM Clean up mission.

- Analytical Services is supporting CHG high-level waste tank vapor and feed to the Waste Treatment PLant characterization (no change from last month).
- PFP is working with General Electric (GE) Vallecitos on a plan to transport a fuel pin to Hanford. This will assist GE Vallecitos with the final step in their nuclear material deinventory.
- PFP coordination with Lawrence Livermore National Laboratory (LLNL) to ship requested oxide material
  (81 kg) to that facility continues. A final determination of the material LLNL is requesting is still being
  negotiated. The shipper/receiver plan was submitted to LLNL for review. A meeting between DOE,
  LLNL and PFP to finalize transportation, container, and shipping agreements is expected to be held in
  mid-August.
- Activities continued for potential receipt of SNF that may be discovered by Bechtel Hanford Inc. during upcoming 105F and 105H reactor basins deactivation at K Basins (no change in status from last month).
- The Sludge Handling Project and T Plant Operations continued preparations for K Basin sludge storage at T Plant (no change from last month).

## **UPCOMING PLANNED KEY EVENTS**

The following key events are extracted from the authorized baseline and are currently expected to be accomplished during the next several months. Most are Enforceable Agreement (EA), HQ or DNFSB Milestones.

#### Waste Management

**TRU Waste Retrieval** - Retrieval of exposed drums will resume upon revision of the Low-Level Burial Grounds (LLBG) Justification for Continued Operations (JCO) (forecast for early August). Planning for buried drum retrieval continues.

**TRU Waste Shipment** - The next shipment to WIPP is scheduled for August 23, 2001. The shipment is contingent upon adequate availability of TRUPACT shipping containers due to competing priorities at Idaho National Engineering and Environmental Laboratory (INEEL) and Rocky Flats.

**LDR Report** - Support resolution of Ecology comments on the LDR report, which are due in August. Ecology will be conducting a site-wide LDR audit as part of their report review.

**TRU Recertification Audit** - Respond as required to the DOE Carlsbad review of the corrective action plans prepared in response to the Recertification Audit.

**Liquid Waste Processing** - Continue groundwater processing at the 200 Area Effluent Treatment Facility.

**MLLW Treatment -** ATG continues preparations for a thermal treatment trial burn in September. Limited additional non-thermal and thermal treatment continue.

Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge - By September 30, 2001: 1) Clear four T Plant canyon cells; 2) Complete the removal of four pieces of major equipment, and 3) Complete contractor Operational Readiness Review.

**Support to RCP -** Continue shipment and placement of D-Cell Hittman liners from the 324 facility in the Low Level Burial Grounds. Support the removal of a Cm/Am source from the 327 facility.

WESF Operations - Complete Hot Cells A through E lay-up in September 2001.

**NMS Project Support** - Continue to receive waste in support of Hanford ash processing through November 2001.

#### **Nuclear Materials Stabilization**

**Oxides/Metals** - Complete stabilization and repackaging Pu metals and oxides in 3013 outer cans by August 31, 2001.

**Disposition of Nuclear Material** - Complete Project W-460 construction activities by October 1, 2001. Complete hot startup of the 2736-ZB Stabilization and Packaging System (W-460) by November 12, 2001.

#### **River Corridor Project**

**Uranium Disposition** - Approximately 5 metric tons of miscellaneous uranium scrap materials will be transferred to the Low-Level Burial Ground by September 30, 2001. In addition, the final disposition of thorium materials located within the 303-K Facility will be completed by September 30, 2001.

**327 Authorization Basis** - Implement technical update of 327 Authorization Basis by the end of FY 2001. This was slipped from May 2001 due to resource limitations created by the new requirements of the 10CFR830 Nuclear Safety Rule.

**300 Area Skyline Initiative -** Demolish 303-K and complete disposition of the water towers by September 30, 2001.

#### **Spent Nuclear Fuels**

MCO shipments - Continue MCO shipments through FY 2001.

**Process modifications** - Complete standard startup review for process modifications in KW Basin in July 2001.

**Canister cleaning operations** - Initiate KW Basin spent nuclear fuel canister cleaning operations in August 2001.

**Shippingport SNF** - Complete Standard Startup Review for Shippingport SNF receipt and storage at CSB and receive all Shippingport Canisters by September 2001. Initiate Shippingport fuel shipments to the CSB in November 2001.

**Start of Construction** - Approve Start of Construction for the K East and K West Basin facility modifications for Accelerated Fuel Transfer Strategy by September 2001.

**Revised transition plan** - Issue revised transition plan for the Sludge Handling Project by September 2001.

#### Landlord

Project L-310 - Complete Construction of Project L-310, "Distribution Water Line," by August 31, 2001.

Project L-298 - Complete Project L-298, "Road Resurfacing," by September 28, 2001.